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Substitute for form 1449A/PTO		Complete if Known	
		Application Number	10/784,911
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	02/23/2004
		First Named Inventor	Xu et al.
		Group Art Unit	1713
		Examiner Name	Satya B. Sastri
		Attorney Docket Number	PA115-57-03
Sheet	1	of	20

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code* (if known)			
iccl	B1	3,527,062		Bilinski et al.	09-08-1970	
	B2	3,783,520		King	01-08-1974	
	B3	3,807,027		Heisler	04-30-1974	
	B4	3,807,029		Troeger	04-30-1974	
	B5	3,811,665		Seelig	05-21-1974	
	B6	4,062,600		Wyse	12-13-1977	
	B7	4,070,116		Frosch et al.	01-24-1978	
	B8	4,098,001		Watson	07-04-1978	
	B9	4,119,688		Hiraoka	10-10-1978	
	B10	4,119,688		Hiraoka	10-10-1978	
	B11	4,155,169		Drake et al.	05-22-1979	
	B12	4,201,800		Alcorn et al.	05-06-1980	
	B13	4,202,107		Watson	05-13-1980	
	B14	4,267,212		Sakawaki	05-12-1981	
	B15	4,326,805		Feldman et al.	04-27-1982	
	B16	4,337,579		De Fazio	07-06-1982	
	B17	4,355,469		Nevins et al.	10-26-1982	
	B18	4,414,750		De Fazio	11-15-1983	
	B19	4,426,247		Toshiakai et al.	01-17-1984	
	B20	4,440,804		Milgram	04-03-1984	
	B21	4,451,507		Beltz et al.	05-29-1994	
	B22	4,507,331		Hiraoka	03-02-1985	
	B23	4,544,572		Sandvig et al.	10-01-1985	
	B24	4,552,832		Blume et al.	11-12-1985	
	B25	4,552,833		Ito et al.	11-12-1985	
	B26	4,600,309		Fay	07-15-1986	
	B27	4,610,442		Oku et al.	09-09-1986	
	B28	4,657,845		Frechet et al.	04-04-1987	
	B29	4,692,205		Sachdev et al.	09-08-1987	
	B30	4,694,703		Routson	09-22-1987	
	B31	4,707,218		Giammarco et al.	11-17-1987	
	B32	4,724,222		Feldman	02-09-1988	
	B33	4,731,155		Napoli et al.	03-15-1988	
iccl	B34	4,737,425		LIN et al.	04-12-1988	
Examiner Signature					Date Considered	3/18/06

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				Group Art Unit	1713
				Examiner Name	Satya B. Sastri
Sheet	2	of	20	Attorney Docket Number	PA115-57-03

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		Number	Kind Code ² (if known)			
lee	B35	4,763,886		Takei	08-16-1988	
	B36	4,808,511		Holmes	02-28-1989	
	B37	4,826,943		Ito et al.	05-02-1989	
	B38	4,846,931		Gmitter et al.	07-11-1989	
	B39	4,848,911		Uchida et al.	07-18-1989	
	B40	4,857,477		Kanamori	08-15-1989	
	B41	4,883,561		Gmitter et al.	11-28-1989	
	B42	4,891,303		Garza et al.	01-02-1990	
	B43	4,908,298		Hefferon et al.	03-13-1990	
	B44	4,919,748		Bredbenner et al.	04-24-1990	
	B45	4,921,778		Thackeray et al.	05-01-1990	
	B46	4,929,083		Brunner	05-29-1990	
	B47	4,931,351		McColgin et al.	06-05-1990	
	B48	4,959,252		Bonnebat et al.	09-25-1990	
	B49	4,964,945		Calhoun	10-23-1990	
	B50	4,976,818		Hashimoto et al.	12-11-1990	
	B51	4,980,316		Huebner	12-25-1990	
	B52	4,999,280		Hiraoka	03-12-1990	
	B53	5,053,318		Gulla et al.	10-01-1991	
	B54	5,063,321		Carter	11-05-1991	
B55	5,071,694		Uekita et al.	12-10-1991		
B56	5,072,126		Proglar	12-10-1991		
B57	5,073,230		Maracas et al.	12-17-1991		
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B61	5,126,006		Cronin et al.	06-30-1992		
B62	5,148,036		Matsugu et al.	09-15-1992		
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B64	5,151,754		Ishibashi et al.	09-29-1992		
B65	5,169,494		Hashimoto et al.	12-08-1992		
B66	5,173,393		Sezi et al.	12-22-1992		
B67	5,179,863		Uchida et al.	01-19-1993		
cel	B68	5,198,326		Hashimoto et al.	03-30-1993	
Examiner Signature					Date Considered	3/18/06

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Substitute for form 1449A/PTO <h2 style="text-align: center; margin: 0;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center; margin: 0;">(use as many sheets as necessary)</p>				Complete if Known	
		Application Number	10/784,911		
		Filing Date	02/23/2004		
		First Named Inventor	Xu et al.		
		Group Art Unit	1713		
		Examiner Name	Satya B. Sastri		
		Attorney Docket Number	PA115-57-03		
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		Number	Kind Code ² (if known)			
ccc	B69	5,204,739		Domenicali	04-20-1993	
	B70	5,206,983		Guckel et al.	05-04-1993	
	B71	5,212,147		Sheats	05-18-1993	
	B72	5,234,793		Sebald et al.	08-10-1993	
	B73	5,240,550		Boehnke et al.	08-31-1993	
	B74	5,240,878		Fizsimmons et al.	08-31-1993	
	B75	5,242,711		DeNatale et al.	09-07-1993	
	B76	5,244,818		Jokerst et al.	09-14-1993	
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	B78	5,270,984		Mine	12-14-1993	
	B79	5,277,749	A	Griffith et al.	01-11-1994	
	B80	5,314,772		Kozicki et al.	05-24-1994	
	B81	5,318,870		Hartney	06-07-1994	
	B82	5,324,683		Fitch et al.	06-28-1994	
	B83	5,328,810		Lowrey et al.	07-12-1994	
	B84	5,330,881		Sidman et al.	07-19-1994	
	B85	5,348,616		Hartman et al.	09-20-1994	
	B86	5,362,606		Hartney et al.	11-08-1994	
	B87	5,366,851		Novembre	11-22-1994	
	B88	5,374,454		Bickford et al.	12-20-1994	
	B89	5,376,810		Hoenk et al.	12-27-1994	
	B90	5,380,474		Rye et al.	01-10-1995	
	B91	5,392,123		Marcus et al.	02-21-1995	
	B92	5,417,802		Obeng	05-23-1995	
	B93	5,421,981		Leader et al.	06-06-1995	
	B94	5,422,295		Choi et al.	06-06-1995	
	B95	5,424,549		Feldman	06-13-1995	
	B96	5,425,848		Haisma et al.	06-20-1995	
	B97	5,425,964		Southwell et al.	06-20-1995	
	B98	5,431,777		Austin et al.	07-11-1995	
ccc	B99	5,439,766		Day et al.	08-08-1995	
	B100	5,452,090		Progler et al.	09-19-1995	
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	B102	5,458,520		DeMercurio et al.	10-17-1995	

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		Number	Kind Code ² (if known)			
100	B103	5,468,542		Crouch	11-21-1995	
	B104	5,480,047		Tanigawa et al.	01-02-1996	
	B105	5,512,131		Kumar et al.	04-30-1996	
	B106	5,515,167		Ledger et al.	05-07-1996	
	B107	5,523,878		Wallace et al.	06-04-1996	
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	B109	5,545,367		Bae et al.	08-13-1996	
	B110	5,566,584		Briganti	10-22-1996	
	B111	5,633,505		Chung et al.	05-27-1997	
	B112	5,654,238		Cronin et al.	08-05-1997	
	B113	5,669,303		Maracas et al.	09-23-1997	
	B114	5,670,415		Rust	09-23-1997	
	B115	5,700,626		Lee et al.	12-23-1997	
	B116	5,723,176		Keyworth et al.	03-03-1998	
	B117	5,724,145		Kondo et al.	03-03-1998	
	B118	5,725,788		Maracas et al.	03-10-1998	
B119	5,736,424		Prybyla et al.	04-07-1998		
B120	5,743,998		Park	04-28-1998		
B121	5,747,102		Smith et al.	05-05-1998		
B122	5,753,014		Van Rijn	05-19-1998		
B123	5,760,500		Kondo et al.	06-02-1998		
B124	5,772,905		A Chou	06-30-1998		
B125	5,776,748		Singhvi et al.	07-07-1998		
B126	5,779,799		Davis	07-14-1998		
B127	5,802,914		Fassler et al.	09-08-1998		
B128	5,855,686		Rust	01-05-1999		
B129	5,877,036		Kawai	03-02-1999		
B130	5,877,861		Ausschnitt et al.	03-02-1999		
B131	5,888,650		Calhoun et al.	03-30-1999		
B132	5,895,263		Carter et al.	04-20-1999		
B133	5,900,160		Whitesides et al.	05-04-1999		
B134	5,907,782		Wu	05-25-1999		
B135	5,912,049		Shirley	06-15-1999		
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vcl	B137	5,937,758		Maracas et al.	08-17-1999	
	B138	5,942,871		Lee	08-24-1999	
	B139	5,948,219		Rohner	09-07-1999	
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	B141	5,948,570		Kornblit et al.	09-07-1999	
	B142	5,952,127		Yamanaka	09-14-1999	
	B143	6,033,977		Gutsche et al.	03-07-2000	
	B144	6,035,805		Rust	03-14-2000	
	B145	6,038,280		Rossiger et al.	03-14-2000	
	B146	6,039,897		Lockhead et al.	03-21-2000	
	B147	6,046,056		Parce et al.	04-04-2000	
	B148	6,051,345		Huang	04-18-2000	
	B149	6,074,827		Nelson et al.	06-13-2000	
	B150	6,091,485		Li et al.	07-18-2000	
	B151	6,096,655		Lee et al.	08-01-2000	
	B152	6,117,708		Wensel	09-12-2000	
	B153	6,125,183		Jiawook et al.	09-26-2000	
B154	6,128,085		Buermann et al.	10-03-2000		
B155	6,143,412		Schueler et al.	11-07-2000		
B156	6,150,231		Muller et al.	11-21-2000		
B157	6,150,680		Eastman et al.	11-21-2000		
B158	6,168,845		Fontana Jr. et al.	01-02-2001		
B159	6,180,239	B1	Whitesides et al.	01-30-2001		
B160	6,188,150	B1	Spence	02-13-2001		
B161	6,204,922	B1	Chalmers	03-20-2001		
B162	6,218,316	B1	Marsh	04-17-2001		
B163	6,245,581	B1	Bonser et al.	06-12-2001		
B164	6,274,294	B1	Hines	08-14-2001		
B165	6,309,580	B1	Chou	10-30-2001		
B166	6,326,627	B1	Putvinski et al.	12-04-2001		
B167	6,329,256	B1	Ibok	12-11-2001		
B168	6,334,960	B1	Willson et al.	01-01-2002		
B169	6,355,198	B1	Kim et al.	03-12-2002		
vcl	B170	6,387,783		Furukawa et al.	05-14-2002	
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ile	B171	6,388,253	B1	Su	05-14-2002	
	B172	6,391,798	B1	DeFelice et al.	05-21-2002	
	B173	6,411,010	B1	Suzuki et al.	06-25-2002	
	B174	6,447,919	B1	Brown et al.	09-10-2002	
	B175	6,455,411	B1	Jiang et al.	09-24-2002	
	B176	6,467,761	B1	Amalucci et al.	10-22-2002	
	B177	6,482,742	B1	Chou	11-19-2002	
	B178	6,489,068	B1	Kye	12-03-2002	
	B179	6,495,624	B1	Brown, James F.	12-17-2002	
	B180	6,514,672	B2	Young et al.	02-04-2003	
	B181	6,518,168	B1	Clem et al.	02-11-2003	
	B182	6,534,418	B1	Plat et al.	03-18-2003	
	B183	6,541,360	B1	Plat et al.	04-01-2003	
	B184	6,561,706		Singh et al.	05-13-2003	
	B185	6,565,928	B2	Sakamoto et al.	05-20-2003	
	B186	6,632,742	B2	Yang et al.	10-14-2003	
	B187	6,635,581	B2	Wong	10-21-2003	
	B188	6,646,662	B1	Nebashi et al.	11-11-2003	
	B189	6,677,252	B2	Marsh	01-13-2004	
	B190	6,696,220	B2	Bailey et al.	02-24-2004	
B191	6,703,190	B2	Elian	03-09-2004		
B192	6,716,767	B2	Shih et al.	04-06-2004		
B193	6,719,915	B2	Willson et al.	04-13-2004		
B194	6,730,256	B1	Bloomstein et al.	05-04-2004		
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lee	B204	2002/0132482		Chou	09-19-2002	
Examiner Signature					Date Considered	3/18/06

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Substitute for form 1449A/PTO			Complete if Known		
			Application Number	10/784,911	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Filing Date	02/23/2004	
			First Named Inventor	Xu et al.	
(use as many sheets as necessary)			Group Art Unit	1713	
			Examiner Name	Satya B. Sastri	
Sheet	7	of	20	Attorney Docket Number	PA115-57-03

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number	Kind Code ² (if known)				
cel	B205	2002/0150398	A1	Choi et al.	10-17-2002		
	B206	2002/0167117		Chou	11-14-2002		
	B207	2003/0080471		Chou	05-01-2003		
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	B219	2004/0036201	A1	Chou et al.	02-26-2004		
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Sheet	8	of	20
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Application Number	10/784,911
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Filing Date	02/23/2004
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First Named Inventor	Xu et al.
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Group Art Unit	1713
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Examiner Name	Satya B. Sastri
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Attorney Docket Number	PA115-57-03
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		Application Number	10/784,911		
		Filing Date	02/23/2004		
		First Named Inventor	Xu et al.		
		Group Art Unit	1713		
		Examiner Name	Satya B. Sastri		
		Attorney Docket Number	PA115-57-03		
Sheet	9	of	20		

FOREIGN PATENT DOCUMENTS								
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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
cell	B246	DE	19648844		Muller et al.	09-18-1997		
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	B261	WO	01/53889		Ling et al.	07-26-2001		
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cell	B266	WO	2004/044651		Choi et al.	05-27-2004		
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	B270	WO	99/63535		Olsson	12-09-1999		

Examiner Signature		Date Considered	cell 3/18/04
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			Application Number	10/784,911	
			Filing Date	02-23-2004	
			First Named Inventor	Xu et al.	
			Group Art Unit	1713	
			Examiner Name	Satya B. Sastri	
Sheet	10	of	20	Attorney Docket Number	PA115-57-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
lee	B271	Abstract of Japanese Patent 02-24848, January 26, 1990		
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Examiner Signature		Date Considered	3/18/06
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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/784,911
		Filing Date	02/23/2004
		First Named Inventor	Xu et al.
		Group Art Unit	1713
		Examiner Name	Satya B. Sastri
		Attorney Docket Number	PA115-57-03
Sheet	11	of	20

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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ice	B292	COWIE, "Polymers: Chemistry and Physics of Modern Materials.", 2 nd Ed., January 1, 1991, pp. 408-409	

Examiner Signature		Date Considered	3/19/06
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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/784,911		
		Filing Date	02/23/2004		
		First Named Inventor	Xu et al.		
		Group Art Unit	1713		
		Examiner Name	Satya B. Sastri		
Sheet	12	of	20	Attorney Docket Number	PA115-57-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
1006	B293	FELDMAN et al., "Wafer Chuck Magnification Correction in X-Ray Lithography.", J. Vac. Sci. Technol. B 16(6), November 1, 1998, pp. 3476 - 3479.	
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			Examiner Name	Satya B. Sastri	
Sheet	13	of	20	Attorney Docket Number	PA115-57-03

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Ull	B304	HOGAN et al., "Impedance Control: An Approach to Manipulation: Part 1- Theory.", Journal of Dynamic Systems, Measurement, and Control, March 1, 1985, Vol. 107, pp. 1-7.	
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Examiner Signature		Date Considered	3/18/16
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		Filing Date	02/23/2004
		First Named Inventor	Xu et al.
		Group Art Unit	1713
		Examiner Name	Satya B. Sastri
		Attorney Docket Number	PA115-57-03
Sheet	14	of	20

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1 CC	B315	KOSEKI, "Design and Accuracy Evaluation of High-Speed and High Precision Parallel Mechanism.", Proc. Of IEEE, January 1, 1998, Intl. Conf. on Robotics & Automation, pp. 1340-1345.	
	B316	KOTACHI et al., "Si-Containing Positive Resist for ArF Excimer Laser Lithography.", Photopolymer Science and Technology, November 4, 1995, pp. 615 - 622.	
	B317	KRAUSS et al., "Fabrication of Nanodevices Using Sub-25 nm Imprint Lithography.", Appl. Phy. Lett., January 1, 1995, 67 (21), pp. 3114-3116.	
	B318	KRUG et al., "Fine Patterning of Thin Sol-gel Films.", Journal of Non-Crystalline Solids, January 1, 1992, 147 & 148, pp. 447-450.	
	B319	LEE et al., "An Ultraprecision Stage for Alignment of Wafers in Advanced Microlithography.", Precision Engineering, September 1, 1997, pp. 113-122.	
	B320	LEE et al., "Ultra Precision Positioning System for Servo Motor-piezo Actuator Using the Dual Servo Loop and Digital filter Implementation.", American Society for Precision Engineering, January 1, 1998, pp. 287-290.	
	B321	LIN, "Multi-Layer Resist Systems.", Introduction to Microlithography, February 14, 1983, pp. 287-349.	
	B322	LUCAS AEROSPACE, Free-Flex ® Pivot Catalog, January 1, 1999	
	B323	MANSKY et al., "Large-Area Domain Alignment in Block Copolymer Thin Films Using Electric Fields.", Macromolecules, June 9, 1998, Vol. 31, No. 13, pp. 4399-4401.	
?	B324	MCMACKIN et al., "A Method of Creating a Turbulent Flow of Fluid between a Mold and a Substrate," U.S. Patent Application 10/898,034, Filed with USPTO July 23, 2004.	
CC	B325	MCMACKIN et al., "A System of Creating a Turbulent Flow of Fluid between a Mold and a Substrate," U.S. Patent Application 10/898,037, Filed with USPTO July 23, 2004.	

Examiner Signature		Date Considered	3/18/06
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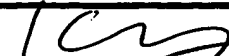
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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/784,911	
			Filing Date	02/23/2004	
			First Named Inventor	Xu et al.	
			Group Art Unit	1713	
			Examiner Name	Satya B. Sastri	
Sheet	15	of	20	Attorney Docket Number	PA115-57-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
1002	B326	MCMACKIN et al., "Single Phase Fluid Imprint Lithography Method," U.S. Patent Application 10/677,639, Filed with USPTO Oct. 16, 2003.		
	B327	MERLET, "Parallel Manipulators: State of the Art and Perspectives.", Advanced Robotics, January 1, 1994, Vol. 8, pp. 589-596.		
	B328	MIRKIN et al., "Emerging Methods for Micro-and-Nanofabrication.", MRS Bulletin, July 1, 2001, pp. 506-509.		
	B329	MITTAL, "Precision Motion Control of a Magnetic Suspension Actuator Using a Robust Nonlinear Compensation Scheme.", IEE/ASME Transactions on Mechatronics., December 1, 1997, Vol. 2., No. 4, pp. 268-280.		
	B330	NERAC.COM Retro Search, "Multi-Layer Resists.", September 2, 2004.		
	B331	NERAC.COM Retro Search, "Reduction of Dimension of Contact Holes.", August 31, 2004.		
	B332	NERAC.COM Retro Search, "Trim Etching of Features Formed on an Organic Layer.", September 2, 2004.		
	B333	NGUYEN, "Asymmetric Fluid-Structure Dynamics in Nanoscale Imprint Lithography." The University of Texas at Austin, August 1, 2001, pp. 1-144.		
	B334	OHYA et al., "Development of 3-DOF Finger Module for Micro Manipulation.", Proc. of IEEE, March 1, 1999, Intl. Conf. on Intelligent Robots and Systems, pp. 894-899.		
	B335	OTTO et al., "Step and Repeat UV-Nanoimprint Lithography: Material Issues.", NNT02 San Francisco, December 11, 2002.		
1002	B336	PAPIRER et al., "Abstract of The Grafting of Perfluorinated Silanes onto the Surface of Silica: Characterization by Inverse Gas Chromatography.", Journal of Colloid and Interface Science 159, August 1, 1993, pp. 238-242.		

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		Filing Date	02/23/2004		
		First Named Inventor	Xu et al.		
		Group Art Unit	1713		
		Examiner Name	Satya B. Sastri		
Sheet	16	of	20	Attorney Docket Number	PA115-57-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
COP	B337	PARIKH et al., "An Intrinsic Relationship between Molecular Structure in Self-Assembled n-Alkylsiloxane Monolayers and Deposition Temperature.", Journal of Phys. Chem., July 1, 1994, pp. 7577-7590.	
	B338	PAROS et al., "How to design Flexure Hinges.", Machine Design, November 25, 1965, pp 151-156.	
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	B340	PERNETTE et al., "Design of Parallel Robots in Microbotics.", Robotica, January 1, 1997, Vol. 15, pp 417-420.	
	B341	PHYSIK INSTRUMENTS, PI Online-Catalog, 1999, from www.physikinstrument.com	
	B342	PHYSIK INSTRUMENTS, Product Catalog for Micropositioning, 1997	
	B343	RAIBERT et al., "Hybrid Position/Force Control of Manipulators.", Journal of Dynamic Systems, Measurement, and Control, June 1, 1981, Vol. 102, pp. 126 - 133.	
	B344	RONG et al., "Design and Analysis of Flexure-Hinge Mechanism Used in Micro-Positioning Stages.", ASME, January 1, 1994, Vol. 2, pp. 979-985.	
	B345	RONG et al., "Dynamics of Parallel Mechanism with Direct Compliance Control.", IEEE, January 1, 1997, pp. 1753-1758.	
	B346	ROOS et al., "Nanoimprint Lithography with a Commercial 4 Inch Bond System for Hot Embossing.", Proceedings of SPIE, October 1, 2001, Vol. 4343, pp. 427-435.	
	B347	RUCHHOEFT et al., "Patterning Curved Surfaces: Template Generation by Ion Beam Proximity Lithography and Relief Transfer by Step and Flash Imprint Lithography.", Journal of Vacuum Science and Technology, pp. 1-17.	

Examiner Signature		Date Considered	3/28/06
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		First Named Inventor	Xu et al.		
		Group Art Unit	1713		
		Examiner Name	Satya B. Sastri		
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CCB	B348	SAGIV, "Organized Monolayers by Absorption. 1. Formation and Structure of Oleophobic Mixed Monolayers on Solid Surfaces.", Journal of American Chemical Society/102:1, January 2, 1980.	
	B349	SCHEER et al., "Problems of the Nanoimprinting Technique for Nanometer Scale Pattern Definition.", J. Vac. Sci. Techno. B., November 1, 1998, pp. 3917-3921.	
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	B351	SOWAH, Diamond Used to Break the Mould [online], Sept. 18, 2002, [Retrieved on Sept. 2, 2003.] Retrieved from the Internet: <URL: http://eetuk.com/showArticle.jhtml?articleID=19203691>.	
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12L	B354	STEWART, "A Platform With Six Degrees of Freedom.", Proc Instn Mech Engrs, May 28, 1965, Vol 180, Pt1, No. 15, pp. 371-378.	
	B355	STIX, "Getting More from Moores", Scientific American	
CCB	B356	SUNG et al., "Abstract of Micro/nano-tribological Characteristics of Self-Assembled Monolayer and its Application in Nano-Structure Fabrication", Elsevier Science B.V., July 1, 2003, Vol. 255, no. 7	
CS	B357	SUNG et al., "Micro/nano-tribological Characteristics of Self-Assembled Monolayer and its Application in Nano-Structure Fabrication.", Elsevier Science B.V., July 1, 2003, Vol. 255, No. 7, pp. 808-818.	
12L	B358	TAJBAKSHI et al., "Three-Degree-of-Freedom Optic Mount for Extreme Ultraviolet.", American Society for Precision Engineering, January 1, 1998, pp. 359-362.	

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		Filing Date	02/23/2004		
		First Named Inventor	Xu et al.		
		Group Art Unit	1713		
		Examiner Name	Satya B. Sastri		
Sheet	18	of	20	Attorney Docket Number	PA115-57-03

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lee	B359	TANIKAWA et al., "Development of Small-sized 3 DOF Finger Module in Micro Hand for Micro Manipulation.", Proc. of IEEE, March 1, 1999, Intl. conf. on Intelligent Robots and Systems, pp. 876-881.	
	B360	TOMITA et al., "A 6-axes Motion Control Method for Parallel-Linkage-Type Fine Motion Stage.", JSPE-58-04, pp. 118-124.	
lee	B361	Translation of Japanese Patent 02-24848, January 26, 1990.	
lee	B362	Translation of Japanese Patent 02-92603, April 3, 1990.	
lee	B363	TRILOGY SYSTEMS, "Linear Motors 310.", www.trilogysystems.com, January 1, 2001.	
?	B364	US Application No. 10/375,817 Filed 02-27-2003, NGUYEN et al., "Method to Reduce Adhesion between a Polymerizable Layer and a Substrate Employing a Flooding-Containing Layer."	
?	B365	US Application No. 10/463,396 Filed 06-17-2003, CHOI et al., "Method to Reduce Adhesion Between a Conformable Region and a Pattern of a Mold."	
?	B366	US Application No. 10/735,710 Filed 12-12-2003, NIMMAKAYALA et al., "Magnification Correction Employing Out-of-Plane Distortion of a Substrate."	
?	B367	US Application No. 10/785,248 Filed 02-24-2004, CHOI et al., "A Method to Control the Relative Position Between a Body and a Surface."	
?	B368	US Application No. 10/768,700 Filed 02-27-2004, SREENIVASAN et al., "Full-Wafer or Large Area Imprinting with Multiple Separated Sub-Fields for High Throughput Lithography."	
?	B369	US Application No. 10/806,956 Filed 03-23-2003, CHOI et al., "An Apparatus to Control Displacement of a Body Spaced-Apart from a Surface."	

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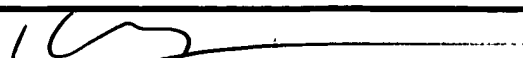
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		Application Number	10/784,911
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	02/23/2004
		First Named Inventor	Xu et al.
		Group Art Unit	1713
		Examiner Name	Satya B. Sastri
Sheet	19	of	20
		Attorney Docket Number	PA115-57-03

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?	B370	US Applications No. 10/194,991, Filed 07-11-2002, SREENIVASAN et al., "Step and Repeat Lithography Processes."	
?	B371	US Applications No. 10/687,519, Filed 10-16-2003, NGUYEN et al., "Low Surfaced Energy Template."	
1ub	B372	VANDERBILT UNIVERSITY OFFICE OF TRANSFER TECHNOLOGY; VU9730 Specifications for Improved Flexure Device; 2001, 25, 192-199.	
1.	B373	WANG et al., "Passive Compliance versus Active Compliance in Robot-Based Automated Assembly Systems.", Industrial Robot, January 1, 1998, Vol. 25, No. 1, pp. 48-57.	
1.	B374	WILLIAMS et al., "Six Degree of Freedom Mag-Lev Stage Development.", SPIE, January 1, 1997, Vol. 3051, pp. 856-867.	
?	B375	WILLSON et al., "Step and Flash Imprint Lithography", U.S. Patent Application 10/806,051, Filed with USPTO March 22, 2004.	
1ub	B376	WU, "Large Area High Density Quantized Magnetic Disks Fabricated Using Nanoimprint Lithography.", J. Vac. Sci. Technol., November 1, 1998, B 16(6), pp. 3825-3829.	
1.	B377	XIA et al., "Soft Lithography.", Annu Rev. Mater Sci. 1998 28: 153-184	
1clp	B378	XIA et al., "Soft Lithography.", Angew. Chem. Int. Ed., January 1, 1998, pp. 551-575.	
?	B379	XU et al., "Materials for Imprint Lithography," U.S. Patent Application 10/784,911, Filed with USPTO Feb. 23, 2004.	
?	B380	XU et al., "Methods for Fabricating Patterned Features Utilizing Imprint Lithography," U.S. Patent Application 10/694,284, Filed with USPTO Oct., 27, 2003.	

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				First Named Inventor	Xu et al.
				Group Art Unit	1713
				Examiner Name	Satya B. Sastri
				Attorney Docket Number	PA115-57-03
Sheet	20	of	20		

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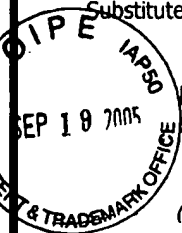
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				FILING DATE	02/23/2004
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
				Attorney Docket Number	PA115-57-03
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U.S. PATENT DOCUMENTS						
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		Number	Kind Code ² (if known)			

1000	G1	6,316,290	B1	Wensel	11/13/2001	
	G2	6,541,356	B2	Fogel et al.	4/1/2003	
	G3	2004/0065252	A1	Sreenivasan et al.	4/8/2004	
	G4	6,696,157	B1	David et al.	2/24/2004	
	G5	2004/0112862	A1	Willson et al.	6/17/2004	
	G6	6,335,149	B1	Xu et al.	1/1/2002	
	G7	6,600,207	B2	Huang et al.	7/29/2003	
	G8	5,956,216		Chou	9/21/1999	
	G9	5,820,769		Chou	10/13/1998	
	G10	6,190,929	B1	Wang et al.	2/20/2001	
	G11	5,204,381		Zeigler	4/20/1993	
	G12	6,066,269		Wei et al.	5/23/2000	
	G13	4,722,878		Watakabe et al.	2/2/1988	
	G14	2001/0044075	A1	Nishimura et al.	11/22/2001	
	G15	5,369,722		Heming et al.	11/29/1994	
	G16	6,475,704	B1	Iwasaki et al.	11/5/2002	
1000	G17	2005/0051698	A1	Sreenivasan et al.	3/10/2005	

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1.cce	G18	6,132,632		Haney et al.	10/17/2000	
	G19	6,344,105	B1	Daugherty et al.	2/5/2002	
	G20	5,905,104		Eklund et al.	5/18/1999	
	G21	6,468,896	B2	Rohr et al.	10/22/2002	
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	G23	5,234,793		Sebald et al.	8/10/1993	
	G24	6,174,931	B1	Moon et al.	1/6/2001	
	G25	2005/0084804	A1	Truskett et al.	4/21/2005	
	G26	2005/0100830	A1	Xu et al.	5/12/2005	
	G27	2005/0118749		Sakamoto et al.	6/2/2005	
	G28	2004/0202872	A1	Fang et al.	10/14/2004	
	G29	4,517,337		Lockhart et al.	5/14/1985	
	G30	2004/0241338	A1	Foster et al.	12/2/2004	
	G31	3,919,351		Chang et al.	11/11/1975	
	G32	4,514,439		Rounds	4/30/1985	
	G33	4,271,258		Watariguchi	6/2/1981	
1.cce	G34	4,988,274		Kenmochi	1/29/1991	

Examiner Signature		Date Considered	3/7/8/06
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Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				APPLICATION NUMBER	10/784,911
				FILING DATE	02/23/2004
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
				Attorney Docket Number	PA115-57-03
Sheet	3	of	10		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
104	G35	6,114,404		Deeken et al.	9/5/2000	
	G36	6,583,248	B1	Bowen	6/24/2003	
	G37	4,687,707		Matsuo et al.	8/18/1987	
	G38	5,314,731		Yoneda et al.	5/24/1994	
	G39	5,482,768		Kawasato et al.	1/9/1996	
	G40	2003/0062334	A1	Lee et al.	4/3/2003	
	G41	2005/0156357	A1	Willson et al.	7/21/2005	
	G42	2005/0160934	A1	Xu et al.	7/28/2005	
	G43	6,932,934	B2	Choi et al.	8/23/2005	
	G44	6,849,558	B2	Schaper	2/1/2005	
ccc	G45	6,936,194	B2	Watts	8/30/2005	

Examiner Signature		Date Considered	7/18/06
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				FILING DATE	02/23/2004
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
Sheet 4 of 10				Attorney Docket Number	PA115-57-03

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document/BG			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ^d
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
100	G46	WO	87/02935		Long et al.	5/21/1987		
	G47	JP	02192045		Mineo et al.	7/27/1990		
	G48	JP	61-40845		Matsuo et al.	2/27/1986		
	G49	JP	2-248480		Yoneda et al.	10/4/1990		
	G50	JP	3-90345		Nobuyoshi et al.	4/16/1991		
100	G51	JP	9-278490		Toru et al.	10/28/1997		

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				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
Sheet 5 of 10				Attorney Docket Number	PA115-57-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

1006	G52	BLOMQUIST ET AL., Fluorinated Acrylates in making Low-Loss, Low-Birefringence, and Single-Mode Optical Waveguides with Exceptional Thermo-Optic Properties, SPIE Conference on Linear Optical Properties of Waveguides and Fibers, Vol. 3799, pp. 266 - 279 7/1/1999	
	G53	ELDADA ET AL., Robust Photopolymers for MCM, Board, and Backplane Optical Interconnects, SPIE Vol. 3288, pp. 175 - 191 1/1/1998	
	G54	ELDADA ET AL., Affordable WDM Components: The Polymer Solution, SPIE Vol. 3234, pp. 161 - 174 1/1/1998	
	G55	ELDADA ET AL., Advanced Polymer Systems for Optoelectronic Integrated Circuit Applications, SPIE Vol. 3006, pp. 344 - 361 1/1/1997	
	G56	HIRAI ET AL., Abstract of Mold Surface Treatment for Imprint Lithography, Journal of Photopolymer Science and Technology, pp 457-462, vol 14, No. 3 8/1/2001	
	G57	ROOS ET AL., Abstract of Nanoimprint Lithography with a Commercial 4 Inch Bond System for Hot Embossing, Proceedings of SPIE Vol. 4343, pp. 427-435 10/1/2001	
	G58	Sol-Gel Technology, www.chemat.com/html/solgel.html 1/14/2004	
	G59	Sol-Gel Chemistry, www.prsc/usm.edu/mauritz/solgel.html 2/2/2004	
1006	G60	HAKOVIRTA ET AL., Optical Properties of Fluorinated Diamond-Like Carbon Films Produced by Pulsed Glow Discharge Plasma Immersion Ion Processing, Journal of Applied Physics 88(3); pp1456-1459 8/1/2000	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				APPLICATION NUMBER	10/784,911
				FILING DATE	02/23/2004
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
Sheet 6 of 10				Attorney Docket Number	PA115-57-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

	G61	APPLICATION NO. 11/027,473, naming Inventors Bailey et al., entitled Release Layer Comprising Diamond-Like Carbon (DLC) or Doped DLC with Tunable Composition for Imprint Lithography Templates and Contact Masks, filed 12/30/2004	
	G62	APPLICATION NO. 10/789,319, naming Inventors Xu et al., entitled Composition for an Etching Mask Comprising a Silicon-Containing Material, filed 2/27/2004	
	G63	APPLICATION NO. 10/948,511, naming Inventors Xu et al., entitled Polymerization Technique to Attenuate Oxygen Inhibition of Solidification of Liquids and Composition Thereof, filed 9/23/2004	
	G64	APPLICATION NO. 10/967,740, naming Inventors Xu et al., entitled Low-K Dielectric Functional Imprinting Materials, filed 10/18/2004	
	G65	APPLICATION NO. 10/919,062, naming Inventors Xu et al., entitled Composition to Provide a Layer with Uniform Etch Characteristics, filed 8/16/2004	
	G66	APPLICATION NO. 10/919,224, naming Inventors Xu et al., entitled Method to Provide a Layer with Uniform Etch Characteristics, filed 8/16/2004	
	G67	APPLICATION NO. 10/978,285, naming Inventors Willson et al., entitled Step and Flash Imprint Lithography, filed 10/29/2004	
	G68	APPLICATION NO. 11/062,420, naming Inventors Willson et al., entitled Step and Flash Imprint Lithography, filed 2/22/2005	
	G69	APPLICATION NO. 11/068,397, naming Inventors Xu et al., entitled Method of Providing Desirable Wetting and Release Characteristics between a Mold and a Polymerizable Composition, filed 2/28/2005	

Examiner Signature		Date Considered	3/18/06
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				FILING DATE	02/23/2004
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
Sheet 7 of 10				Attorney Docket Number	PA115-57-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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	G70	APPLICATION NO. 11/068,174, naming inventors Xu et al., entitled Method to Reduce Adhesion Between a Conformable Region and a Mold, filed 2/28/2005	
1cc	G71	Data Sheet for MAK (Methyl n-Amyl Ketone), www.sp-chem.com/fine_e 1/1/2003	
f	G72	Data Sheet for gamma-Glycidioxypropyltrimethoxysilane, www.powerchemical.net/3100.htm 12/5/2003	
	G73	Silicon or Silica, www.mii.org/Minerals/photosil 3/31/2005	
116	G74	Electronic Devices and Circuits, people.deas.harvard.edu/~jones/es154/lectures/lecture_2/materials/materials.html 3/31/2005	
	G75	Data Sheet for Cymel 303ULF, www.cytos.com	
	G76	Data Sheet for Cycat 4040, www.cytos.com	
1cc	G77	International Chemical Safety Card for p-Toluenesulfonic Acid, www.itcilo.it/english/actrav/telearn/osh/ic/104154.htm 12/5/2003	
	G78	Data Sheet for p-Toluenesulfonic Acid, NIOSH Manual of Analytical Methods (NMAM), Fourth Edition	

Examiner Signature		Date Considered	3/18/06
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				FILING DATE	02/23/2004
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
Sheet 8 of 10				Attorney Docket Number	PA115-57-03

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	G79	Data Sheet for Dow Corning Z-6018,	
11/11/02	G80	Data Sheet for Methyl Amyl Ketone, www.arb.ca.gov/db/solvents/solvent_pages/Ketones-HTML/methyl_amyl.htm 3/31/2005	
	G81	GOLDEN ET AL., Designing Porous Low-k Dielectrics, www.reed-electronics.com/semiconductor/index.asp?layout=articlePrint&articleID=CA82824 4/6/2005	
	G82	PADOVANI ET AL., Chemically Bonded Porogens in Methylsilsesquioxane: I. Structure and Bonding, Journal of the Electrochemical Society, 149 (12) F161-F170 10/16/2002	
	G83	WOLF ET AL., Silicon Processing for the VLSI Era, Volume 1--Process Technology, pp. 407-413 1/1/1986	
	G84	TANIGUCHI ET AL., Diamond Nanoimprint Lithography, Nanotechnology, 2002, vol. 13, no. 5, pp. 592-596(5) 1/1/2002	
	G85	KIYOHARA ET AL., Abstract of Plasma Etching of CVD Diamond Films using an ECR-type Oxygen Source, http://www.iop.org/EJ/abstract/0957-4484/10/4/304 9/26/2003	
	G86	WOLF ET AL., Silicon Processing for the VLSI Era, Volume 1--Process Technology, pp. 541, 542, 544, 564, 565 1/1/1986	
11/11/02	G87	Novec Fluorosurfactant FC-4432, http://multimedia.mmm.com/mws/mediawebserver.dyn?333333SQa783cmJ3wMj333wyXuFiilH-8/4/2005	

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				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
Sheet 9 of 10				Attorney Docket Number	PA115-57-03

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llc	G88	Abstract of Japanese Patent 61-040845, 2/27/1986	
	G89	Abstract of Japanese Patent 02-248480, 10/4/1990	
	G90	Abstract of Japanese Patent 3-090345, 4/16/1991	
	G91	Abstract of Japanese Patent 09-278490, 10/28/1997	
	G92	Abstract of Japanese Patent 61-040845, 2/27/1986	
llc	G93	Abstract of Japanese Patent 02-248480, 10/4/1990	
	G94	APPLICATION NO. 11/187,406, naming Inventors Xu, entitled Composition for adhering materials together, filed 7/22/2005	
	G95	APPLICATION NO. 11/187,407, naming Inventors Xu, entitled Method for adhering materials together, filed 7/22/2005	
llc	G96	XU ET AL., Development of Imprint Materials for the Step and Flash Imprint Lithography Process, SPIE Microlithography Conference 2/1/2004	

Examiner Signature	<i>llc</i>	Date Considered	3/18/06
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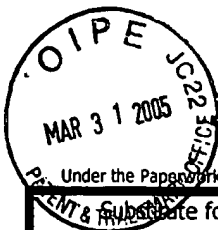
100	G97	NORDQUIST ET AL., Image Placement Issues for ITO-based Step and Flash Imprint Lithography Templates, J. Vac. Sci. Technol. B, pp. 695-701 3/1/2004	
104	G98	RESNICK ET AL., Release Layers for Contact and Imprint Lithography, Semiconductor International, pp. 71-80 6/1/2002	

Examiner Signature		Date Considered	8/7/02
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				APPLICATION NUMBER	10/784,911
				FILING DATE	02/23/2004
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
				Attorney Docket Number	PA115-57-03
Sheet	1	of	5		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			

10/784,911	C1	6,391,217	B2	Schaffer et al.	5/21/2002	
	C2	2004/0007799	A1	Choi et al.	1/15/2004	
	C3	2004/0021254	A1	Sreenivasan et al.	2/5/2004	
	C4	2004/0021866	A1	Watts et al.	2/5/2004	
	C5	2004/0022888	A1	Sreenivasan et al.	2/5/2004	
	C6	2002/0177319	A1	Chou	11/28/2002	
	C7	6,518,189	B1	Chou	2/11/2003	
	C8	2004/0192041	A1	Jeong et al.	9/30/2004	
	C9	6,828,244	B2	Chou	12/7/2004	
	C10	6,809,356	B2	Chou	10/26/2004	
	C11	2004/0197843	A1	Chou et al.	10/7/2004	
	C12	2004/0156108	A1	Chou et al.	8/12/2004	
	C13	2004/0137734	A1	Chou et al.	7/15/2004	
	C14	2004/0131718	A1	Chou et al.	7/8/2004	
	C15	2004/0118809	A1	Chou et al.	6/24/2004	
	C16	2004/0046288	A1	Chou	3/11/2004	
	C17	2003/0080472	A1	Chou	5/1/2003	
	C18	2003/0034329	A1	Chou	2/20/2003	

Examiner Signature	<i>10/784,911</i>	Date Considered	3/18/06
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11/11	C19	2002/0042027	A1	Chou et al.	4/11/2002	
	C20	10/763,885		Xu et al.	1/23/2004	
	C21	5,594,042		Glover et al.	1/14/1997	
	C22	5,629,095		Bujanowski et al.	5/13/1997	
	C23	5,861,467		Bujanowski et al.	1/19/1999	
	C24	5,331,020		Brown et al.	7/19/1994	
	C25	4,617,238		Crivello et al.	10/14/1986	
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	C27	11/012,374		Xu et al.	12/15/2004	
	C28	4,512,848		Deckman et al.	4/23/1985	
	C29	6,517,995	B1	Jacobson et al.	2/11/2003	
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	C32	5,028,366		Harakal et al.	7/2/1991	
	C33	5,601,641		Stephens	2/11/1997	
	C34	5,849,209		Kindt-Larsen et al.	12/15/1998	
1/11	C35	5,849,222		Jen et al.	12/15/1998	

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				Attorney Docket Number	PA115-57-03
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		Office 3	Number ²	Kind Code ⁵ (if known)				

cc	C36	WO	02/07199		Chou	1/24/2002		
	C37	WO	2004/114016		Chou et al.	12/29/2004		
	C38	WO	99/05724		Chou et al.	2/4/1999		
	C39	WO	03/010289		Chou et al.	2/6/2003		
	C40	WO	03/079416		Chou	9/25/2003		
cc	C41	WO	03/099536		Chou et al.	12/4/2003		

Examiner Signature		Date Considered	3/18/06
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				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
Sheet 4 of 5				Attorney Docket Number	PA115-57-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS); title of the article (when appropriate); title of the item (book, magazine, journal, serial, symposium, catalog, etc.); date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

11C6	C42	Colburn et al., Step and Flash Imprint Lithography for sub-100 nm Patterning, Proceedings of SPIE Vol. 3997, pp. 453 - 457, 1/1/2000	
	C43	Papirer et al., The Grafting of Perfluorinated Silanes onto the Surface of Silica: Characterization by Inverse Gas Chromatography, Journal of Colloid and Interface Science 159, pp.238-242, 8/1/1993	
	C44	Chou et al., Nanoimprint Lithography, Journal of Vacuum Science Technolgy B 14(16), pp. 4129-4133, 11/1/1996	
	C45	Colburn et al., Development and Advantages of Step-and-Flash Lithography, Solid State Technology, 7/1/2001	
	C46	Colburn et al., Characterization and Modeling of Volumetric and Mechanical Properties for Step and Flash Imprint Lithography Photopolymers, Journal of Vacuum Science Technology. Vol b. 19(6), 11/1/2001	
	C47	Yu et al., Properties of Fluorinated Amorphous Diamond Like Carbon Films by PECVD, Applied Surface Science 219 (3-4); pp. 228-237, 12/1/2003	
	C48	Compon et al., Electroanalysis at Diamond-Like and Doped-Diamond Electrodes, Electroanalysis 15(17); pp. 1349-1363, 9/1/2003	
	C49	Mansano et al., Protective Carbon Layer for Chemical Corrosion of Stainless Steel, Diamond and Related Materials 12 (3-7); pp. 749-752, 3/1/2003	
11C6	C50	Butter et al., Production and Wetting Properties of Fluorinated Diamond-Like Carbon Coatings, Thin Solid Films, 311(1-2); pp. 107-113, 12/31/1997	

Examiner Signature	11C6	Date Considered	3/18/06
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				FILING DATE	02/23/2004
				FIRST NAMED INVENTOR	Xu et al.
				Group Art Unit	1713
				Examiner Name	Sastri, Satya B.
Sheet 5 of 5				Attorney Docket Number	PA115-57-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

CCP	C51	Hakovirta et al., Heat Resistance of Fluorinated Diamond-Like Carbon Films, Diamond and Related Materials 10(8); pp. 1486-1490, 8/1/2001	
	C52	Zhu et al., The Improvement of the Oxidation Resistance of TiAl Alloys by Fluorine Plasma-Based Ion Implantation, Surface and Coatings Technology 158; pp. 502-507, 9/1/2002	
	C53	Yao et al., Structural, Mechanical and Hydrophobic Properties of Fluorine-Doped Diamond-Like Carbon Films Synthesized by Plasma Immersion Ion Implantation and Deposition (PIII-D), Applied Surface Science 230; pp. 172-178, 4/17/2004	
	C54	Bailey et al., Step and Flash Imprint Lithography: Defect Analysis, Journal of Vacuum Science, B 19(6), pp. 2806-2810, 11/1/2001	
ICF	C55	Bailey et al., Step and Flash Imprint Lithography: Template Surface Treatment and Defect Analysis, Journal of Vacuum Science, B 18(6), pp. 3572-3577, 11/1/2000	
	C56	Schneider et al., Stripes of Partially Fluorinated Alkyl Chains: Dipolar Langmuir Monolayers	

Examiner Signature	IKC [Signature]	Date Considered	3/18/06
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Title of Invention	MATERIALS FOR IMPRINT LITHOGRAPHY
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Application Number : 10/784911



Confirmation Number: 6149

First Named Applicant: Frank Xu

Attorney Docket Number: PA115-57-03

Art Unit: 1713

Examiner: Satya B. Sastri

Search string: (6468642 or 5542978 or 5837314 or 6565776 or 6503914 or 6649272 or 6204343 or 4614667 or 3810874 or 6737489 or 6721529 or 6664306 or 6790905 or 6544594 or 6774183 or 6830819 or 6802870 or 5389696).pn

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
(u)	1	6468642	2002-10-22	Bray et al.	B1		
	2	5542978	1996-08-06	Kindt-Larsen et al.			
	3	5837314	1998-11-17	Beaton et al.			
	4	6565776	2003-05-20	Li et al.	B1		
	5	6503914	2003-01-07	Benish et al.	B1		
	6	6649272	2003-11-18	Moore et al.	B2		
	7	6204343	2001-03-20	Barucha et al.	B1		
	8	4614667	1986-09-30	Larson et al.			
	9	3810874	1974-05-14	Mitsch et al.			
	10	6737489	2004-05-18	Linert et al.	B2		
	11	6721529	2004-04-13	Chen et al.	B2		
	12	6664306	2003-12-16	Gaddam et al.	B2		
	13	6790905	2004-09-14	Fitzgerald et al.	B2		
	14	6544594	2003-04-08	Linford et al.	B2		
	15	6774183	2004-08-10	Palumbo et al.	B1		
	16	6830819	2004-12-14	Kaplan et al.	B2		
	17	6802870	2004-10-12	Chang et al.	B2		
(lee)	18	5389696	1995-02-14	Dempsey et al.			

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				Satya B. Sastri	
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				PA115-57-03	

[illegible]

Examiner Signature	<i>1000</i>	Date Considered	<i>3/14/06</i>
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Sheet				1	of
				2	
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[illegible]

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Sheet	2	of	2	Attorney Docket Number	PA115-57-03

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Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

WLB	F8	BENDER ET AL., Multiple Imprinting in UV-based Nanoimprint Lithography: Related Material Issues, Microelectronic Engineering 61 - 62, pp. 407 - 413 1/1/2002	
	F9	APPLICATION NO. 11/126,946, naming Inventors Choi et al., entitled Formation of Discontinuous Films During an Imprint Lithography Process, filed 5/11/2005	
	F10	APPLICATION NO. 11/127,041, naming Inventors Sreenivasan et al., entitled Step and Repeat Imprint Lithography Processes, filed 5/11/2005	
	F11	APPLICATION NO. 11/127,080, naming Inventors Sreenivasan et al., entitled Step and Repeat Imprint Lithography Systems, filed 5/11/2005	

Examiner Signature		Date Considered	3/7/06
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¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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